

SAFETY DATA SHEET



Basalt Fiber Reinforced Polymer BFRP

Revision date: 15.09.2015

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Chemical name Basalt Fiber Reinforced Polymer BFRP
Version number 1.0
Brand name MiniBars™ and BasBars™

1.2 Relevant identified uses of the substance or mixture and uses advised against

Uses of the chemical Basalt Fiber Reinforced, non-metallic arming for concrete.
Uses advised against This product is not recommended for other uses than those specified above.

1.3 Details of the supplier of the safety data sheet

Company/undertaking identification ReforceTech AS
Luftveien 4
3440 Røyken
Norway
Phone: +47 971 70 670
<http://www.reforcetech.com>
E-mail reforcetech@reforcetech.com

Responsible ReforceTech AS
Author Sensor Chemcontrol AS

1.4 Emergency telephone number **Poison Information Centre: +47 22 59 13 00.**

2. HAZARD IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to 1272/2008EC Not a hazardous substance or hazardous mixture according to Regulation (EC) No 1272/2008.

2.2 Label elements

Hazard statement(s) EUH210 Safety data sheet available on request.

Precautionary statements

Prevention P261 Avoid breathing dust.

2.3 Other hazards

Use and handling of product may present a safety hazard even if the the product itself is not dangerous.
The chemical does not meet the criteria for PBT or vPvB in accordance with REACH Annex XIII.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Ingredients	Identification	Classification	Note	Weight%
Nuisance dust, total dust			Æ	
Basalt fibre			Z	ca 70
Hardened vinyl ester			Z	ca 30

Explanation

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Ingredients comments This chemical does not contain any classified substances.

Note A/E: The substance is listed because it has a exposure limit (OEL).

Note Z: Although the component are not classified as dangerous according to Regulation (EC) No 1272/2008, it provides valuable information to the product composition.

4. FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation Symptomatic treatment for inhalation of dust or aerosols. Fresh air, warmth and rest, preferably in a comfortable, half-sitting position. If breathing stops, perform artificial respiration. Keep respiratory tract open.

Skin contact Rinse thoroughly with running water. Remove contaminated clothing, watches and the like. It is not probable that the product is harmful in contact with skin.

Eye contact If fibres or dust get into the eye, remove by flushing with water; If not successful, seek medical attention.

Ingestion No exposure is likely due to the physical condition of the product.

Medical information Symptomatic treatment.

4.2 Most important symptoms and effects, both acute and delayed n/a

4.3 Indication of any immediate medical attention and special treatment needed n/a

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media Water spray, foam, CO₂ or powder.

Extinguishing media which shall not be used Avoid using directed water jets during extinguishing work.

5.2 Special hazards arising from the substance or mixture May develop harmful combustion products by heating or fire.

5.3 Advice for firefighters n/a

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures Wear protective clothing as described in Section 8.2 of the material safety data sheet.

6.2 Environmental precautions Avoid generation and spreading of dust.

6.3 Methods and material for containment and cleaning up Sweep together and collect.

6.4 Reference to other sections See section 7 for information on safe handling. See section 8 for information on personal protection equipment. See section 12 for information on ecology. See section 13 for waste disposal.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling Handle in accordance with good hygiene and safety practice. Operating instructions should be followed to ensure safe use and best results.

7.2 Conditions for safe storage, including any incompatibilities The product is flammable and should not be exposed to open flames. Keep in original packaging.

7.3 Specific end use(s) Basalt Fiber Reinforced non-metallic arming for concrete.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Ingredients	Einecs nr	CAS nr	8 hour		Short		Ref.	Note	Year
			mg/m ³	ppm	mg/m ³	ppm			
Nuisance dust, total dust			10				Norsk	21	2015

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OAR remarks	Norsk = Measures and limit values for acceptable pollutants in the working atmosphere. Obtained from the norwegian regulation "Forskrift om tiltaks- og grenseverdier". Footnote 21: The threshold value is determined for total dust, which include all dust particles in the air.
8.2 Exposure controls	
Exposure controls	Common sense and safety precautions should always be used when handling chemicals. Ensure that all containers are properly labeled to prevent accidental ingestion or improper use. Ensure good working hygiene. Make use of recommended safety equipment. Provide adequate exhaust ventilation, or ventilation in the workplace. Avoid contact with eyes and skin.
Respiration protection	Use P3 filters if there is a lot of fine dust (smoke), or where the impurities are particularly dangerous. Use P2 filters against most types of dust with low toxicity. P1 filter is only to be used if dust is harmless. Dust filters to be replaced when it becomes difficult to breathe through. Normally not required but for prolonged exposure is respiratory protection required. The European Committee for Standardisation (CEN) standards EN136, EN140 and EN405 specify respirator masks and EN149 and EN143 specify filter recommendations.
Eye protection	Wear goggles or face shield for protection against dust. Eye protection shall be in accordance to EN 166 standard.
Hand protection	EN 388 - Protective gloves against mechanical risks may be considered. Latex or vinyl gloves are recommended for prolonged exposure.
Skin protection	Not required under normal use of the product.
Additional information	It is good industrial hygiene practices to avoid skin contact as possible. Do not wear rings, watches, etc. which are suitable for keeping the product and thereby cause skin reactions. Barrier creams may help to protect exposed skin, but can not substitute for gloves. Remove contaminated clothing to prevent skin contact. After washing the skin apply oily skin cream to replace lost skin oils. Keep good order.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Form	Solid
Colour	Black
Odour	None, or weak vinyl ester odor
Smell limit	n/a
pH - conc.	n/a
Melting point	1450 °C (Basalt)
Boiling point	n/a
Flash point	480 °C
Relative evaporation rate	n/a
Flammability (solid, gas)	n/a
Explosion limits	n/a
Vapour pressure	n/a
Vapour density	n/a
Relative density	1,9
Solubility	n/a
Solubility water	0 % (Non soluble)
Partition coefficient n-octanol/water	n/a
Auto-ignition temp.	n/a
Decomposition temperature	n/a
Viscosity	n/a
Explosive properties	n/a
Oxidising properties	n/a
9.2 Other information	n/a

10. STABILITY AND REACTIVITY

10.1 Reactivity	n/a
10.2 Chemical stability	Stable under normal conditions.

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10.3 Possibility of hazardous reactions	n/a
10.4 Conditions to avoid	Keep away from open flames, sparks and all other forms of ignition.
10.5 Incompatible materials	n/a
10.6 Hazardous decomposition products	The product does not decompose if it is used as intended.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity	Under normal use, no health effects are anticipated.
Skin corrosion/irritation	Based on available data, the criteria for classification are not fulfilled.
Serious eye damage/ irritation	May cause mechanical irritation.
Respiratory or skin sensitisation	None of the substances listed in section 3 is classified as allergenic.
Germ cell mutagenicity	None of the substances listed in section 3 is classified as mutagenic.
Carcinogenicity	None of the substances listed in section 3 is classified as carcinogenic. Basalt fibers in the product is uniform and does not come under the definition of MMMF (Man Made MineralFibres), and therefore not affected by classification for these (according to the EU Commission Directive 97/69 / EC). Basalt fibers used in the reinforcement have a diameter of more than 3 micrometers and therefore can not enter the lungs. They are therefore not possible carcinogens according to EU Commission EC Guideline 1999/45 (EC). No fibers created during cutting the product can be classified as carcinogens by the criteria of the World Health Organization. Analysis was conducted by "Statens arbeidsmiljøinstitutt" (norwegian national work environment institute) on dust collected on filter in October 2010 in accordance with "Determination of airborne fiber number concentration. A recommended method, by phase contrast optical micro copy (membrane filter method)." World Health Organization, Geneva 1997, 53 pages.
Reproductive toxicity	None of the substances listed in section 3 is classified as reproduction toxic.
STOT-single exposure	Based on available data, no classification criteria are met.
STOT-repeated exposure	Based on available data, the criteria for classification are not fulfilled.
Aspiration hazard	Based on available data, no classification criteria are met.
Additional information	Probable route of exposure: Skin contact. Inhalation of dust or airborne particles.

12. ECOLOGICAL INFORMATION

12.1 Toxicity	Mixture with low solubility. No eco-toxic effect known.
12.2 Persistence and degradability	The product is not biologically degradable.
12.3 Bioaccumulative potential	No bio-accumulation is indicated. No harmful long-term effects are expected on aquatic organisms.
12.4 Mobility in soil	The product is not soluble in water.
12.5 Results of PBT and vPvB assessment	This product does not contain a PBT or vPvB. The chemical does not meet the criteria for PBT or vPvB in accordance with REACH Annex XIII.
12.6 Other adverse effects	n/a

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Disposal group	EWC code assessed by the end user, if necessary EWC: 16 01 99 wastes not otherwise specified. EWC code assigned by the user based on the application of the product. The EWC code are for illustrative purposes only. Always check the waste codes in view of the current state the product is in. The final waste groups and tags must be determined by the user, based on the actual use of the product.
Packings	Contaminated packaging material should be treated equivalent to residual chemicals. Clean packaging material should be subjected to waste management schemes (recovery recycling, reuse) according to local legislation.
Additional information	The product shall not be allowed to enter drains, waterways, groundwater or the environment.

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14. TRANSPORT INFORMATION

14.1 UN number	n/a
14.2 UN proper shipping name	n/a
14.3 Transport hazard class(es)	
ADR/RID class	n/a
14.4 Packing group	n/a
14.5 Environmental hazards	n/a
14.6 Special precautions for user	n/a
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	n/a

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture	Norwegian Regulations: "FOR-2012-06-16-622 Forskrift om klassifisering, merking og emballering av stoffer og stoffblandinger (CLP)". Commission Regulation (EU) No 453/2010 Annex II (Appendix II - "II"). European Parliament and Council Regulation (EC) 1272/2008. Regulations regarding OAR values. Transport of hazardous goods: ADR, RID, IMDG, IATA (2011). ECHA (European Chemicals Agency) C&L Inventory database. Norwegian Waste Regulations (miljøverndepartementet): "FOR 2004-06-01 No. 930: Regulations relating to the recycling of waste". COMMISSION REGULATION (EU) No 944/2015 of 23 Mars 2015 (ATP6). Ex-ECB databasen (http://esis.jrc.ec.europa.eu/index.php?PGM=cla).
15.2 Chemical safety assessment	Supplier has not carried out a Chemical Safety Assessment for the substance or mixture.

Additional information

Classification of this product is given on the basis of the available information from the vendor.

16. OTHER INFORMATION

Key literature references and sources for data	Material safety data sheet from the supplier.
Abbreviations in the document	N/a - No relevant information. EWC - European Waste Catalogue codes. VPvB - very Persistent and very Bioaccumulative (require special attention under REACH). PBT - Persistent, Bioaccumulative and Toxic.
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--- SAFETY DATA SHEET conforming to commission regulation 1272/2008EC and 453/2010 ---